COLUMBIA READY MIX

Fax Cover Letter
Private and Confidential

Date: 8/31/07 Time: 12:39 PM Fax: (208) 378-5744
To: Doug Hardesty Company: EPA
From: Chad C. # of Pages (including this page) 13

Remarks:
Here is our application.

Thank You!

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YAKIMA BUY IT!

This fax communication is intended only for the use of the addressee and may contain information that is privileged and confidential. If you are not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify immediately and return the original by mail at our expense. If the fax we sent you is incomplete, please contact us at (509) 453-2063. Thank you.

P.O. Box 9337 Yakima, WA 98909 / Main Office: (509) 453-2063 / Cell: (509) 728-2401
Concrete & Gravel Dispatch: (509) 457-3654 / Main Office Fax: (509) 877-6963

Form Approved OMB 2060-0538 Approval Expires 11/30/2007

EPA **U. S. Environmental Protection Agency**
Region 10 Federal Air Rules for Reservations, 40 CFR 49.139

Non-Title V Operating Permit Application Form
Request for Federally-Enforceable Limitation

Complete all sections of this form. For additional guidance, see the Non-Title V Operating Permit Application Form Instructions. Electronic copies of forms and guidance can be found at www.epa.gov/r10earth/FARR

Mail completed application forms to: Non-Title V Operating Permit Coordinator
U.S. EPA, Region 10
AWT-107
1200 Sixth Avenue
Seattle, WA 98101

A. General Information

1. Name of Air Pollution Source: Wapato Pit
   Nature of the Business: Mining/Crushing/Stockpiling/Processing/Screening
   Primary SIC Code: _____ Other SIC Codes: _____
   Street Address: 2129, 2133 Lateral 1 Rd Wapato, WA 98951
   Telephone Number: (509) 453-2063 Source Facsimile Number: (509) 877-6963
2. Local Individual Responsible for Compliance Name: Larry Sali
   Mailing Address: P.O. Box 9337 Yakima, WA 98909
   Telephone Number: (509) 453-2063 Facsimile Number: (509) 877-6963
3. Individual Authorized to Receive Requests for Data & Information Name: Gayle Sali
   Mailing Address: P.O. Box 9337 Yakima, WA 98909
4. Owner Name: LS Wapato LLC
   Mailing Address: P.O. Box 11347 Yakima, WA 98909
   Telephone Number: (509) 453-2063
5. Operator Name (if different from Owner): Columbia Ready Mix Inc.
   Mailing Address: P.O. Box 9337 Yakima, WA 98909
   Telephone Number: (509) 453-2063

Form Approved OMB 2060-0558 Approval Expires 11/30/2007

B. Limitation Request

For each air pollutant and for all emissions units and air pollutant-generating activities to be covered by a limitation, attach the following:

1. The proposed limitation and a description of its effect on actual emissions or the potential to emit.
2. The proposed testing, monitoring, recordkeeping and reporting requirements to be used to demonstrate and assure compliance with the proposed limitation.
3. A description of the production processes and a related process flow chart.
4. A list of emission units and air pollution-generating activities.
5. The type and quantity of fuels and/or raw materials used.
6. A description and estimated efficiency of air pollution control equipment under present or anticipated operating conditions.
7. Estimates of the current actual emissions and current potential to emit, including all calculations for the estimates.
8. Estimates of the allowable emissions and/or potential to emit that would result from compliance with the proposed limitation, including all calculations for the estimates.

C. Certification of Truth, Accuracy and Completeness

The Owner or Operator (listed above) must sign this statement before submittal of this application form.

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in and attached to this form are true, accurate and complete.

Owner or Operator (circle one) Name: Larry Sali

Owner or Operator Signature: Larry Sali Date: 8-31-07

The public reporting and recordkeeping burden for this collection of information is estimated at eight hours for a facility which is not considered a complex operation, and up to 40 hours for a moderately complex operation. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, US Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number 2060-0558 in any correspondence. Do not send the completed form to this address.

COLUMBIA READY-MIX, INC.

DUST MITIGATION PLAN

For

MINING and CRUSHING OPERATION
At
LATERAL 1 – WAPATO

COLUMBIA READY-MIX, INC.
PO BOX 9337
YAKIMA, WA 98909
(509) 453-2063

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INTRODUCTION

Columbia Ready-Mix, Inc. intends to install and operate a rock mining and processing operation on Lateral 1, ½ mile west of Lateral A. A pit will be established at a location on the site that contains deposits of rock suitable for the production of construction aggregate. Rock will be mined from the pit, delivered to a portable rock crushing plant, and processed into construction aggregate. The plant to be installed is currently permitted and in compliance with air quality regulations at Thorp Road, south of Union Gap. The plant will be installed temporarily at this site for the production of 100,000 tons of construction aggregate. A New Source Review Order of Approval will be issued by the Yakima Regional Clean Air Authority. The Order of Approval will contain conditions that assure the plant and associated activities comply with all applicable federal, state and local air quality laws and regulations. Based on our experience and expertise, the operation can function without posing any disruption to nearby persons and land uses.

The purpose of this plan is to detail source specific systems and actions that will be utilized to prevent dust from becoming airborne and traveling beyond the property line of the facility. Although preventing one hundred per cent of dust emissions is not feasible, Columbia Ready-Mix is committed to employing proven, highly effective preventive measures (Best Available Control Technology) to assure little or no dust leaves our property. When implemented, these measures and controls will assure that neighbors and the public in general will not be adversely affected by airborne dust.

Mining and processing operations are part of a pervasively regulated industry. That is to say that every operational aspect of the operation is scrutinized for compliance with safety, health and environmental standards. Columbia Ready-Mix has a history of compliance with state, federal and local regulations. In fact, we typically go beyond minimum compliance with air quality regulations and permit conditions. That will be the case for this site. As this plan is implemented, we will utilize more than required measures to minimize dust emissions and will be prepared to implement contingency measures in the event weather conditions cause preventive measures to become temporarily ineffective.

Potential sources of dust emissions are identified in this plan. Potential emissions are estimated for each source. Preventive measures are selected for each source based on their proven effectiveness for the source to which it is applied. Uncontrolled emissions are estimated, using science-based emission factors. Then, emissions are estimated after applying the controls. Emission factors and control efficiencies are taken from the EPA document, Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: *Stationary Point and Area Sources:* Section 11.19.2, Crushed Stone Processing and Pulverized Mineral Processing; Section 13.2.2, Unpaved Roads; and Section 13.2.4, Aggregate Handling and Storage Piles.

PROCESS DESCRIPTION

Rock is loosened in the pit and then loaded by power shovel or front-end loader that feed the material directly into the aggregate processing operation (crusher). Processing operations include crushing, screening, size classification, material handling and storage. If not controlled, all of these processes can be sources of airborne particulate matter (PM: all airborne particles. PM^{10}: airborne particles 10 microns in diameter and smaller). Note that PM^{10} is a subset, included in PM.

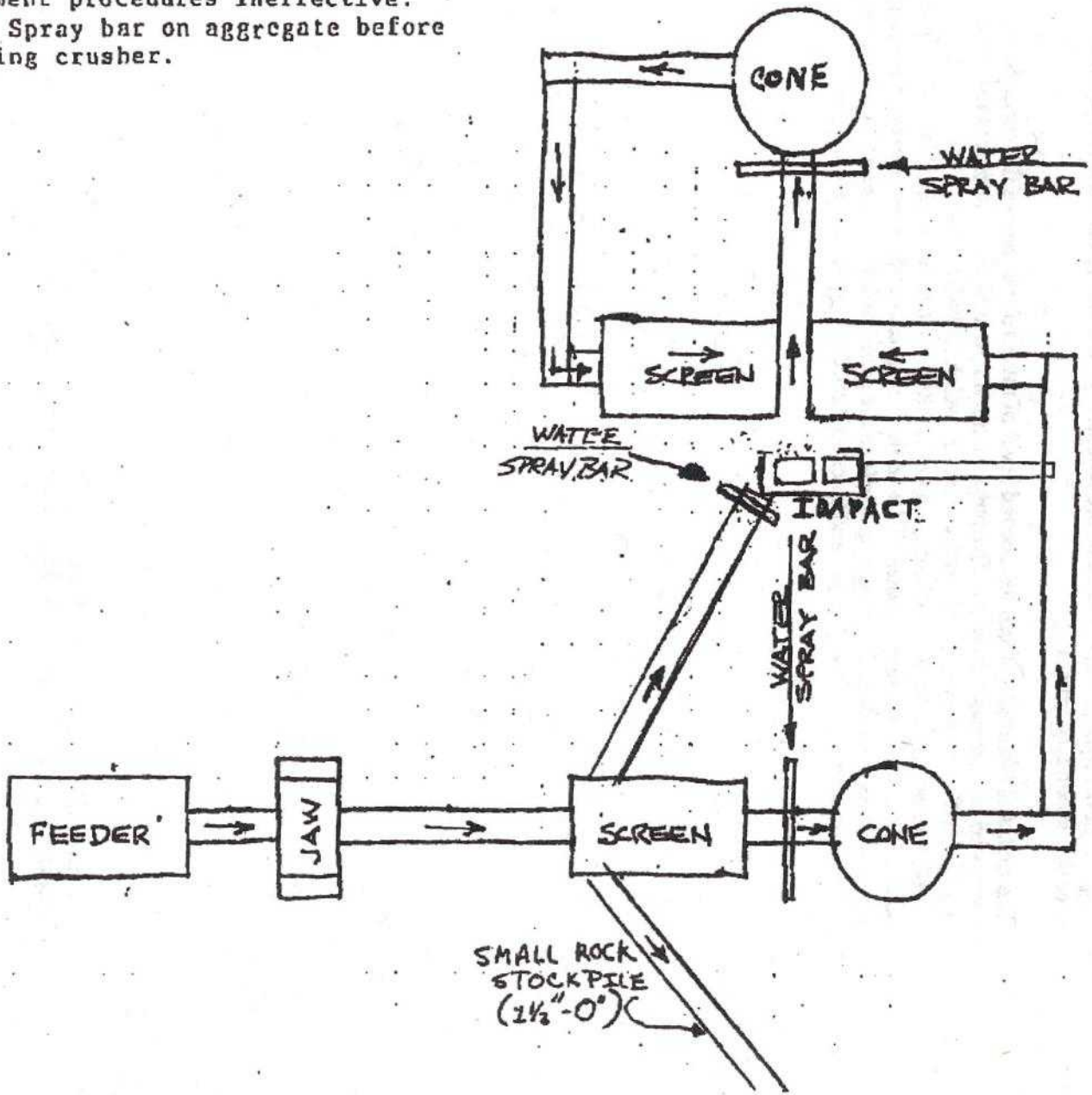
Mined rock is delivered to the processing plant by front end loader. A jaw crusher is used for initial reduction. The crusher product and the feeder throughs (undersize material) are discharged onto a belt conveyor and conveyed to a screen. This unit separates oversized rock from the smaller stone. The undersized material from the screen is transported to a storage pile. The material is then transported to an off-site processing facility for the production of concrete aggregate and sand. The stone that is too large to pass through the top deck of the screen is processed in the secondary crusher. A cone crusher is used for secondary crushing.

The material (throughs) from the second level of the screen bypasses the secondary crusher and are conveyed to an impact crusher. The output from the secondary crusher and the impact crusher are transported by conveyor to the tertiary circuit, which includes a sizing screen and a tertiary crusher. Tertiary crushing is performed using a cone crusher. Oversize material from the top deck of the sizing screen is fed to the tertiary crusher. The tertiary crusher output is returned to the sizing screen. Various product streams with different size gradations are separated in the screening operations. The products are conveyed to a load out bunker and trucked directly to open area stock piles.

p Built spray bar with variable
ssure. Air pollution is regular
er truck operations shall be used
prevent airborne fugitive dust.
shing operations shall cease
porarily when high winds make dust
tement procedures ineffective.
er Spray bar on aggregate before
ering crusher.

COLUMBIA READY MIX

CLOSED CIRCUIT SCREENING PLANT CRUSHING



POTENTIAL EMISSIONS

If uncontrolled, aggregate processing can cause nuisance problems from airborne particles transporting off site. However, the generally large particles produced are controlled readily. Individual operations, such as wet crushing and grinding, washing, screening, and dredging, take place with "high" moisture content (2.5 to 5.1 weight percent). Such wet processes do not generate significant particulate emissions.

Emissions may be categorized as either process or fugitive dust sources. Process sources include those for which emissions are amenable to capture and subsequent control. Fugitive dust sources generally involve the re-entrainment of settled dust by wind or machine movement. Factors affecting emissions from either source category include the stone size distribution and the surface moisture content of the stone processed, the process throughput rate, the type of equipment and operating practices used, and topographical and climatic factors.

Of graphical and seasonal factors, the primary variables affecting uncontrolled PM emissions are wind and material moisture content. Wind parameters vary with geographical location, season, and weather. It can be expected that the level of emissions will be greater during periods of high winds. The material moisture content also varies with geographical location, season, and weather. Therefore, the levels of uncontrolled emissions from both process sources and fugitive dust sources generally will be greater in the summer months because of a higher evaporation rate.

The moisture content of the material can have a substantial effect on emissions. This effect is evident throughout the processing operations. Surface wetness causes fine particles to agglomerate on or to adhere to the faces of larger stones, with a resulting dust suppression effect. This plant utilizes a wet suppression system (spray nozzles) to maintain relatively high material moisture content which effectively controls PM emissions throughout the process.

Controls, applied to uncontrolled emissions, at the respective efficiencies, result in controlled (prevented) emissions at significantly lower quantities, as shown in Tables 1 (PM) and 2 (PM^{10}).

- Where is the Power IC engine? non Road?

Emission Estimates

The nature of particulate emissions dictates that larger (heavier) particles fall out and are deposited on the property where they are generated. Thus, estimated emissions are not estimates of particulate that will transport beyond the property of the operation.

TABLE 1 – Estimated PM Emissions

Source	Material Processed (tons/yr)	Emission Factor (lbs/ton)	Uncontrolled Emissions (tons/yr)	Control Efficiency %	Controlled Emissions (tons/yr)
Feeder & Primary Crusher	100,000	.0054	.2700	77.7	.06021
Secondary Crusher	65,000	.0054	.1755	77.7	.03914
Tertiary Crusher	65,000	.0054	.1755	77.7	.03914
Fines Crusher	20,000	.0390	.3900	92.0	.03120
Screening	100,000	.0250	1.2500	91.6	.10500
Fines Screening	100,000	.3000	15.000	96.9	.46500
Conveyor Transfer Points	100,000	.0030	.1500	95.9	.00615
Haul Roads	100,000	.0223	1.1150	80.0	.22300
Handling & Storage	100,000	.0134	.6700	80.0	.22400
Total	-------	-------	19.1960	-------	1.1929

TABLE 2 – Estimated PM^{10} Emissions

Source	Material Processed (tons/yr)	Emission Factor (lbs/ton)	Uncontrolled Emissions (tons/yr)	Control Efficiency %	Controlled Emissions (tons/yr)
Feeder & Primary Crusher	100,000	.0024	.1200	77.5	.02700
Secondary Crusher	65,000	.0024	.0780	77.5	.01755
Tertiary Crusher	65,000	.0024	.0780	77.5	.01755
Fines Crusher	20,000	.015	.1500	92.0	.01200
Screening	100,000	.0087	.4350	91.5	.03698
Fines Screening	100,000	.072	3.6000	96.9	.11160
Conveyor Transfer Points	100,000	.0011	.0550	99.9	.00006
Haul Roads	100,000	.008	.4000	80.0	.08000
Handling & Storage	100,000	.0047	.2350	80.0	.04700
Total	-------	-------	5.1510	-------	.34974

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PREVENTIVE MEASURES

Particulate (dust) emissions may be generated by several different sources at aggregate production and storage operations. Potential emission sources are listed below, along with the preventive measures (controls) to be employed, and their efficiency in eliminating airborne dust.

Seasonal Operation

In addition to source-specific controls, Columbia plans to conduct 50% of annual production during the months of December through February. High ground moisture and low evaporation rates during these months will increase the effectiveness and efficiency of the process dust and fugitive dust controls.

Process Dust Controls

1. **Feeder and Primary Crushing**
   No data is available from EPA to calculate control efficiency at these points. However, material delivered to the feeder and conveyed through the primary crusher will have a moisture content of 2.6 to 5.1 %. Thus, control efficiency is equal to that of the tertiary crusher.
   Control: Ambient moisture. Efficiency: PM - 77.7 %; PM^{10} - 77.5%

2. **Secondary Crushing**
   No data is available from EPA to calculate control efficiency at this point. However, this plant utilizes a water spray control at this point which provides a control efficiency equal to or greater than that of the tertiary crusher.
   Control: Water spray. Efficiency: PM - 77.7 %; PM^{10} - 77.5%

3. **Tertiary Crushing**
   Control: Water spray. Efficiency: PM - 77.7 %; PM^{10} - 77.5%

4. **Fines Crushing**
   Control: Water spray. Efficiency: PM - 92.0 %; PM^{10} - 92.0%

5. **Screening**
   Control: Water spray. Efficiency: PM - 91.6 %; PM^{10} - 91.5%

6. **Fines Screening**
   Control: Water spray. Efficiency: PM - 96.9 %; PM^{10} - 96.9%

7. **Conveyor Transfer Points**
   Control: Water spray. Efficiency: PM - 95.9 %; PM^{10} - 95.9%

Fugitive Dust Controls

1. **Haul Roads**
   Controls: Water application, gravel cover, limiting vehicle speed and dust palliative application. Efficiency: PM - *80%; PM^{10} - *80%

2. **Aggregate Handling and Storage**
   Controls: Water application, limiting silt content and limiting drop distance when loading and unloading. Efficiency: PM - *80%; PM^{10} - *80%

*Conservative estimates based on multiple control measures and seasonal operating schedule.

CONTINGENCY MEASURES

For any operation, the potential exists, for unforeseen conditions which may influence the effectiveness of dust preventive measures. Contingency measures are planned to be utilized until such time as the effectiveness of preventive measures is restored. Following are the conditions which may occur, and the contingency measures planned.

High Winds

1. **Process Sources:** The processing plant is designed to operate under high wind conditions and will not be adversely affected by wind at speeds less than 30 mph. At speeds greater than 30 mph, the controls become less effective.
   Contingency Measures – First, increase water volume to spray bars then, curtail or cease operation if more water is unsuccessful.

2. **Fugitive Sources:** High winds may affect haul roads, aggregate handling and product storage more than process sources. However, these effects are generally minimal once the surface particles on haul roads and storage piles are removed by the wind.
   Contingency Measures – First, cease aggregate handling then, apply more water to haul roads.

Extreme Temperatures

1. **Process Sources:** The processing plant is dependent on a steady supply of water to control dust. Cold temperatures may cause water delivery systems to freeze. Once water is delivered to the process, the controls are more effective in cold weather due to freezing and low evaporation rates. High temperatures cause increased evaporation rates.
   Low Temperature Contingency Measures – First restore water by thawing then, cease operation if thawing is unsuccessful.
   High Temperature Contingency Measures – First, increase water volume to spray bars then, curtail or cease operation if more water is unsuccessful.

2. **Fugitive Sources:** Cold temperatures have a positive effect on fugitive controls due to freezing and low evaporation rates. Thus, no contingency is planned. High temperatures may affect haul roads, aggregate handling and product storage due to high evaporation rates. However, this likelihood is diminished by the seasonal operation control.
   Contingency Measures – First, apply water more frequently to storage piles and haul roads then, curtail or cease aggregate handling and vehicle traffic on haul roads if more frequent water application is unsuccessful.

Other Contingency Measures

Other conditions may occur which diminish the effectiveness of controls or contingency measures. If such a situation occurs, operations will be curtailed or ceased until such time as an effective control can be restored or an effective contingency measure can be found and utilized.

REGULATORY REQUIREMENTS

Air quality law and regulatory requirements for mining and aggregate processing are numerous. Complying with state New Source Review requirements by processing a New Source Review Application with Yakima Regional Clean Air Authority, will assure compliance with all air quality laws and regulations.

Following is a list of air quality laws and regulations applicable to this facility. Since state rules can be no less stringent than a federal rule, only state and local rules are listed, except where no state or local rule exists.

Federal
The Federal Clean Air Act;
40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants;
40 CFR 60, Appendix A, Method 9

State
Chapter 70.94 Washington Clean Air Act;
Chapter 173-400 Washington Administrative Code, General Regulations for Air Pollution Sources;
Chapter 173-460 Washington Administrative Code, Controls for New Sources of Toxic Air Pollutants;
Chapter 197-11 Washington Administrative Code, SEPA Rules

Local
Regulation 1 Yakima Regional Clean Air Authority